

ABDALYAN, Petr Grigor'yevich; KHROMCHENKO, Il'ya Alekseyevich;
KHARLAMOV, P.G., inzh., retsenzent; VUL'F, V.V., inzh.,
red.; BOBROVA, Ye.N., tekhn. red.

[Unit method of repair of the TE1, TEM1, TE2 diesel locomotives]
Agregatnyi metod remonta teplovozov TE1, TEM1, TE2, optyt. depo
Likhobory Moskovskoi dorogi. Moskva, Transzheldorizdat, 1962. 67 p.
(Diesel locomotives--Maintenance and repair) (MIRA 16:2)

VUL'F, V. V.

ZALIT, Nikolay Nikolayevich, inzhener; ATRUSHKEVICH, A.G., inzhener, redaktor; VUL'F, V.V., inzhener, redaktor; VERINA, G.P., tekhnicheskij redaktor

[Locomotive repairs] Remont parovozov. Izd. 3-e, isprav. i dop. Moskva, Gos. transportnoe zhelez-dor. izd-vo, 1954. 531 p. (MLRA 8:7)
(Locomotives--Repairs)

AKBASHEV, B.S.; VUL'F, V.V., inzh., retsenzent; FILIPPOVA, L.S.,
red.; DROZDOVA, N.D., tekhn. red..

[Use of the GEN-150(V) elastomer for the restoration of the
tightness and hermetic sealing of joints] Primenenie elasto-
mera marki GEN-150 (V) dlja vosstanovlenija natiagov i ger-
metizatsii soedinenij. Moskva, Transzheldcrizdat, 1963. 18 p.
(MIRA 16:8)

(Elastomers) (Railroads—Maintenance and repair)

TERTYCHKO, Nikolay Alekseyevich; TYRICHEV, Albert Georgiyevich;
TISHCHENKO, Nikolay Ivanovich; KESAREV, A.P., inzh., retsenzent;
VUL'F, V.V., inzh., red.; KHITROV, P.A., tekhn.red.

[Inspection and adjuntment operations in the repair of diesel
locomotives] Proverki i regulirovki pri remonte teplovozov.
Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshche-
niia, 1960. 291 p. (MIRA 14:4)
(Diesel locomotives--Maintenance and repair)

VUL'F, V.V., otv.za vypusk; BOBROVA, Ye.N., tekhn.red.

[Regulations for current maintenance of TE3 and TE7 series diesel locomotives] Pravila tekushchego remonta teplovozov serii TE3 i TE7. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 415 p. (MIRA 12:12)

1. Russia (1923- U.S.S.R.) Ministerstvo putey soobshcheniya.
(Diesel locomotives--Maintenance and repair)

VUL'F, V. V. AND N. N. ZALIT

Spravochnik po remontu parovozov. Izd. 2., ispr. i dopoln. Moskva, Transzheldorizdat, 1943. 471 p. diagrs.

(Handbook of locomotive repair.)

DLC: TJ675.Z3 1943

SO: Manufacturing and Mechanical Engineering in the Soviet Union,
Library of Congress, 1953

REMPEL', Aron Iosifovich, inzh.; PEREL'MAN, Yuri' Zalemanovich, inzh.; MI-KHAYLOVSKIY, Aleksandr Moiseyevich, inzh.; RAKHMATULIN, M.D., retsen-zent; VUL'F, V.V., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Repairing the cylinder-piston system of the 2D100 diesel engine; practices of the Tashkent Diesel Locomotive Depot] Remont tsilindro-porshnevoi gruppy diazolia 2D100; is opyta Tashkentskogo teplovoznogo depo. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei so-obshcheniya, 1961. 38 p. (MIRA 14:7)

(Diesel engines—Maintenance and repair)

JUL'F, V.V.

SHCHERBUKHIN, Sergey timofeyevich, inzhener; VUL'F, V.V., inzhener,
redaktor; BOBROVA, Ye.N., tekhnicheskij redaktor

[Organizing quick repairs of locomotives; practice of the advanced
depots of the North Caucasian railroad] Organizatsiia promyshlennogo
remonta parovozov; opyt peredovykh depo Severo-Kavkazskoi zh.d.
Moskva, Gos.transp.zhel-dor. izd-vo, 195h. 39 p. (MLRA 10:10)
(Locomotives--Maintenance and repair)

VUL'F, V.V.; CHEPOVSKAYA, V.F., starshiy inzh.

New method of inspection, maintenance and repair of locomotives.
Elek. i tepl. tiaga 5 no.12:9-11 D '61. (MIRA 15:1)

1. Glavnnyy tekhnolog otdela remonta i modernizatsii teplovozov
Glavnogo upravleniya lokomotivnogo khozyaystva Ministerstva putey
soobshcheniya (for Vul'f). 2. Otdel remonta i modernizatsii
elektropodvizhnogo sostava Glavnogo upravleniya lokomotivnogo
khozyaystva Ministerstva putey soobshcheniya (for Chepovskaya).
(Locomotives—Maintenance and repair)

GONCHAROV, Yuriy Grigor'yevich, inzh.; GANKEVICH, Tadeush TSezarevich, inzh.;
PETROV, Vladimir Yegorovich, inzh.; SHAMANOV, L.G., inzh., retsenzent;
IVANIK, V.F., inzh., retsenzent; VUL'F, V.V., inzh., red.; KHITROW,
P.A., tekhn. red.

[Operation and maintenance of a diesel locomotive] Upravlenie teplo-
vozom i ego obsluzhivanie. Moskva, Vses. izdatel'sko-poligr. ob"edi-
nenie M-va putei soobshcheniiia, 1961. 180 p. diagr. (MIRA 14:8)
(Diesel locomotives)

ZALIT, Nikolay Nikolayevich; VUL'F, Valentin Vasil'yevich; ATRUSHKEVICH, A.G., inzh., red.; BOBROVA, E.N., tekhn. red.

[Handbook on repairing locomotives] Spravochnik po remontu parovozov. Izd. 4., perer. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 435 p.

(MIRA 11:10)

(Locomotives--Maintenance and repair).

VUL'Y, Valentin Vasil'yevich, inzhener; DACHUK, L.Ya., inzhener, redaktor;
YUDZON, D.M., tekhnicheskij redaktor

[Safety manual for mechanic repairing locomotives in depots] Pauiatkin
po tekhnike bezopasnosti slesariu po remontu parovozov v depo. Izd.
2-oe, perer. Moskva, Gos. transp. zhel-dor. izd-vo, 1956. 100 p.
(MLRA 9:10)

(Locomotives--Repairs--Safety measures)

KURYATNIKOV, A.A.; VUL'F, V.V., retsensent; PESKOVA, L.N., red.;
MEDVEDEVA, M.A., tekhn. red.

[Receiving, storage and transportation of the spare parts of
diesel locomotives] Priemka, khranenie i transportirovka
zaspasnykh chastei teplovozov. Moskva, Transzheldorizdat,
1963. 27 p. (MIRA 16:6)
(Diesel locomotives--Equipment and supplies)

VULF, YE. V.

DECEASED

SEE ILC

BOTANY

VUL'F, Yu.

Izbrannye Raboty po Kristallofizike i Kristallografi (Selected Works in
Crystallophysics and Crystallography)

342 p. 1.50

SO: Four Continent Book List, April 1954

VUL'F, Yu. V.

"Izbrannye raboty po kristallofizike i kristallografi," Moscow, Gosudarst. Izdatel'. Tekh.-Teoret. Lit., 1952.

1. VUL'F, Yu. V.
2. USSR (600)
4. Physics and Mathematics
7. Selected Works on Crystallophysics and Crystallography. Yu. V. Vul'f. (Moscow-Leningrad, State Technical Press, 1952). Reviewed by A. V. Shubnikov. Sov. Knige, No. 12', 1952.
9. ~~Report~~ Report U-3081, 16 Jan. 1953, Unclassified.

VUL'F, Yu. V.

Selected Works on Crystallophysics and Crystallography. Glavpoligrafizdat, Main Polygraphic Publishing House, 342 pp, 1952/

VUL'FERT, A.

VUL'FERT, A., inzhener-polkovnik; ZRMLOV, F., polkovnik.

Visual aids in training. Voen.-inzh. zhur., 101 no.11:8-12 N '57.
(Military education) (MLRA 10:11)

BERNSHTEYN, L.B., kand. tekhn. nauk; GRISHIN, M.M., doktor tekhn. nauk, prof., red.; VUL'FERT, I.I., spets. red.; POGREBNAYA, L.L., red. izd-va; KULESNIKOVA, A.P., tekhn. red.

[German-Russian dictionary of hydraulic engineering] Nemetzko-russkii gidrotekhnicheskii slovar'. Pod red. M.M. Grishina. Moskva, Glav. red. inostr. nauchno-tekn. slovarei Fizmatgiza, 1961. 579 p. (MIRA 15:3)

(German language--Dictionaries--Russian)
(Hydraulic engineering--Dictionaries)

VUL'FIN, L.I.

Canning and preserving factories must have permanent sources
of raw materials. Kons.i ov.prom. 15 no.7:32-33 Jl '60.
(MIRA 13:6)

1. Bykhovskiy konservno-ovoshchesushil'nyj kombinat.
(White Russia—Canning industry)

Vul'fin, Z.B.

MURAV'YEV, K.N.; KONYUKHOV, S.M., dots., red.; VUL'FIN, Z.B.; FEDOROV, B.F.,
inzh., retsenzent; KOROLEV, M.F., inzh., retsenzent; DUGIN, K.A.,
tekhn. red.

[Work of mechanic and fitter] Slesarno-sborochnoe delo. Pod red.
S.M. Koniukhova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.
lit-ry, 1956. 397 p. (MIRA 11#?)

(Machine-shop practice)

Vul'fin, Z. B.

MURAV'YEV, K.N.; KONYUKHOV, S.M., dotsent; ~~VUL'FIN, Z.B.~~; FEDOROV, B.F.,
inzhener, retsenzent; KOROLEV, M.F., ~~inzhener~~, retsenzent.

[Machine shop practice] Slesarno-sborochnoe delo. Pod red. S.M. Loniukhova. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1955. 403 p.
(Machine-shop practice)

(MLRA 8:4)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001961310007-3

VULFIUS, A. F.

Vulfius, A. F. "The Typical Electric Microphonic Seismograph." In the book:
Informatsionnyi Sbornik N.G.R.T., Moscow-Leningrad, 1939, pp. 57-62.

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001961310007-3"

VUL'FIUS, GECRGIJ L'VOVITCH

317N/5
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.V9

Gosudarstvennaya Publichnaya Biblioteka Imeni M. Yu. Saltikov-Shchedrina (The Lenin Public Library) Leningrad, 19
V. Tables.
At Head of Title: Russia (RSFSR) Ministerstvo Kultury.
Lib. Has: 1955

919 CPY IN REF
 317N/5

MEA

VRPRINTSFV, B.N.; VUL'FICH, Ye.A.; SHUNG-SAYA, V.Ye.

Study of supravital nerve cells. Biofizika 9 no. 1:122-124
'64. (MIRA 17:7)

1. Institut biologicheskoy fiziki AN SSSR, Moscow.

GINZBURG, K.Ye.; SHCHEGLOVA, G.M.; VUL'FIUS, Ye.V.

Rapid method for the combustion of soils and plants. *Pochvovedanie*
no.5:89-96 My '63. (MIRA 16:5)

1. Pochvennyy institut imeni V.V.Dokuchayev,
(Soils—Analysis) (Plants—Chemical analysis)

VUL'FMAN, Ye.

How we placed ships in icebound docks. Rech.transp. 23
no.9:58 S '64. (MIRA 19:1)

1. Starshiy dispatcher po sudoremontu Leningradskoy
remontno-ekspluatatsionnoy bazy.

VUL'FON, V. I. s. kand. khim. nauk

Forms of water migration in nature. Priroda 47 no.6:97-100 Ja '58.
(MIRA 11:7)

1. Leningradskoye vyssheye inzhenernoye morskoye uchilishche im.
admirala S.O. Makarova.
(Water)

VUL'FOV, B.

Training students on the basis of the moral code of the
builders of communism. Geog. v shkole 25 no.1:35-38 Ja-F '62.
(MIRA 15:1)
(Communist education)

CHANYSHEV, A.Kh., prepodavatel'; VUL'FOV, B.Z., prepodavatel'.

Industrial training practice of students of School №.544 of Moscow
at the Vladimir Il'ich Factory. Politekhn. obuch. no.4:13-17 Ap '58.
(MIRA 11:3)

1. Srednyaya shkola №.544, Moskva.
(Education, Cooperative)

L 56519-65	ENT(d)/EXP(v)/EXP(k)/EXP(h)/EXP(l)	Pa-f/Pq-4/Pf-4/Pg-4/Pk-4/P1-4
ACCESSION NR: AP5016766	IJP(c) B0	UR/0 06/65/000/010/0084/0084
AUTHOR: Vul'fov, M. Ya.	62L 71.2-503.55	48 B
TITLE: Digital servosystem. Class 42, No. 171171	0, 1965, 8	
SOURCE: Byulleten' izobreteniy i tovarkh znakov, no.		
TOPIC TAGS: servosystem, digital servosystem, automatic control, programmer		
<p>ABSTRACT: The proposed digital servosystem for controlling the operation of slabbing mills contains an input device, a control device, an adder to determine mismatches, a code-to-voltage converter, amplifiers, and an electric drive. To simplify the control-program input circuit, the system is designed as follows: The programmer, with a decimal number base, is connected through two-out-of-five-code converters to a comparison and add circuits and an analyzer. The circuits and analyzer are connected to registers storing roll position codes. The code converters in the registers are in turn connected to a reversible counter, and linked to the roll position detector. The detector carries a magnetic drum with magnetic-modulation heads, the control unit of the "two-out-of-five" code, and a "one-out-of-ten" code.</p>		
Card 1/2		

L 56519-65							
ACCESSION NR: AP5016766							
code converter with a sign-control circuit. The comparison and add circuit is also connected to attenuators which are in turn connected to the amplifiers of the electric drive.				[IW]			
ASSOCIATION: none							
SUBMITTED: 08JUL63	ENCL: 00			SUB. CODE: (E, OP)			
NO REF Sov: 000	OTHER: COO			ATD PRESS: 4035			
<i>4035</i> Card 2/2							

VULFOVICH A8L8

600

1. VUL'FOVICH, A. L.; Inzh.
2. USSR (600)
4. Dust - Removal
7. Dust removal system. Biul. stroi. tekhn. 9 no. 8, 1952
Upravleniye Stroitel'stva Mnogostazhnymi
Zdaniyami MPS
9. Monthly List of Russian Accessions, Library of Congress
August 1952, UNCLASSIFIED.

VUL'FOVICH, A.I., inzh.

Conference on coal flotation. Ugol' 39 no.7:74-75 Jl '64.
(MIRA 17:10)

1. Vsesoyuznyy tsentral'nyy gosudarstvennyy institut po
proyektirovaniyu i tekhniko-ekonomiceskim obosnovaniyam
razvitiya ugol'noy promyshlennosti.

VUL'FOVICH, B.A., kand.tekhn.nauk

Selecting cartographic projections for modeling automatic course
plotting in hyperbolic radio navigation systems on small vessels.
Trudy TSNIIMF 8 nc.47:96-113 '63. (MIRA 16:12)

VUL'FOVICH, B.A., kand.tekhn.nauk

Limits in the use of the method of corresponding altitudes to
determine the position of a ship by the sun. Sudovozhdenie
no.2:27-33 '62. (MIRA 17:4)

1. Kafedra morekhodnoy astronomii Leningradskogo vysshego
inzhenernogo morskogo uchilishcha im. admirala Makarova.

VUL'FOVICH, B. A., Cand Tech Sci -- (diss) "Determination of the location of vessels by measurements of the large heights of the sun." Leningrad, 1960. 31 pp; (Ministry of Maritime Affairs USSR, Leningrad Naval Engineering College im Admiral Makarov); 150 copies; price not given; (KL, 51-60, 117)

45323

S/154/62/000/006/002/002
D036/D114

16,500

AUTHOR: Vul'fovich, B.A., Candidate of Technical SciencesTITLE: An investigation into the shape of a type I cyclic curve on the
Mercator projection of an ellipsoidPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofoto-
s"yemka, no. 6, 1962, 21-27

TEXT: The following basic formula is derived for the shape of a type I cyclic curve on the Mercator projection of an ellipsoid:
 $(a_e - b_e)' = 0.00305 \cdot b_e^{0.3} - 0.40114 \cdot b_e^0$ (subscript e stands for ellipsoid) (10),
where a_e and b_e are the major and minor semiaxes of the curve respectively. The results produced by this formula are discussed, in particular the conditions when the cyclic curve becomes a circle. There are 3 figures.

ASSOCIATION: Leningradskoye vyssheye inzhenernoye morskoye uchilishche im. adm.
Makarova (Leningrad School of Higher Naval Engineering imeni
Admiral Makarov)SUBMITTED: August 7, 1961
Card 1/1

VUL'FOVICH, B.A.

Graphic method of determining a ship's location by the sun with
 $h_{\odot} > 87^{\circ}30'$. Inform.sbor.TSNIIMP no.60 Sudovozh.i sviaz' no.15:
38-48 '61. (MIL 16:2)
(Nautical astronomy—Graphic methods)

VUL'FOVICH, B.A.

Relative disposition of the pole of illumination and the center
of the cyclic curve. Geod.i kart. no.8:47-51 Ag '61.

(MIRA 14:10)

(Curves) (Astronomy, Spherical and practical)

ROMANOVA, I.S.; VUL'FOVICH, B.M.; RONKIN, M.A.

Significance of cerebrovascular disorders (according to rheo-
ancephalographic data) in the diagnosis of psychoses of the
involutional period. Trudy 1-go MMI 34:110-117 '64.
(MIRA 18:11)

I. Kafedra psichiatrii (zav. - zasluzhennyy deyatel' nauki
prof. V.M. Banshehikov) 1-go Moskovskogo ordena Lenina medi-
tsinskogo instituta imeni Sechenova.

VUL'FOVICH, B.M.; RONKIN, M.A.

Characteristics of changes in cerebral vessels based on rheographic data from patients with primary cerebral atrophic processes.
Zhur. nevr. i psikh. 64 no.8:1198-1204 '64. (MIRA 17:12)

1. Kafedra psichiatrii (zaveduyushchiy - prof. V.M. Banachikov)
i kafedra nervnykh bolezney (zaveduyushchiy - prof. V.V. Mikheyev)
I Moskovskogo ordena Lenina meditsinskog, instituta im. Sechenova.

VUL'FOVICH, B.M.

Differential diagnosis of atrophic and vascular diseases of
the brain. Trudy 1-go MMI 21:285-292 '63. (MIRA 16:9)

1. Kafedra psichiatrii (zav. - prof. V.M.Banshchikov) 1-go
Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.
Sechenova.

(DIAGNOSIS, DIFFERENTIAL) (BRAIN--DISEASES)
(CEREBROVASCULAR DISEASES)

VUL'FOVICH, B. S.

USSR/Medicine - Influenza Vaccines Oct 53

"Effectiveness of Immunization Against Influenza
With Dry Live Vaccine in Stalingrad in 1952,"
A. V. Dubakina, I. A. Sutin, B. S. Vul'fovich,
Stalingrad Inst of Epidemiol, Microbiol, and
Hygiene

Zhur Mikro Epid i Immun, No 10, pp 63-65

Immunization with dry live influenza vaccine of
the A type prep'd partly at the Inst of Virology
in Ivanovskiy and partly at the Inst im I. I.
Mechnikov was carried out in one of the districts

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of Stalingrad in Dec 51-Jan 52. Among those im-
munized the incidence of influenza amounted to
2.6%, among those not immunized to 5%. In-
vestigation of the serum of immunized persons
2 wks after immunization showed that there was
a considerable increase of A antibodies and
some increase of B antibodies.

PANOV, V.S.; SIMONOV, P.V.; VUF'FOVICH, E.A.

Coding system for the drawings of machine parts shaped as
bodies of revolution. Trudy Proek. tekhn. i nauch.-tekhn. inst.
no.2211-22 1963
(MIRA 1967)

ACCESSION NR: AR4023358

S/0284/64/000/002/0028/0029

SOURCE: RZh. Voprosy* tekhnicheskogo progressa i organizatsii proizvodstva v
machinostroyenii, Abs. 2.35.168

AUTHOR: Panov, V. D.; Simonov, P. V., Vul'fovich, E. A.

TITLE: A system for coding the blueprint data of parts in machine building which
are solids of revolution

CITED SOURCE: Tr. Projektn. tekhnol. i n.-i. in-ta. Volgo-Vyatsk. sovnarkhoz,
vy*p. 2, 1963, 11-28

TOPIC TAGS: coding blueprint data. machine part coding, axially symmetric part,
technological process automation, computer-controlled machine tools

TRANSLATION: In the automatic planning of technological processes, the memory
(M) of the electronic computer (EC) receives in digital code information about
the geometry and dimensions of each part together with the characteristics of its
workpiece and other necessary data. By means of coding one prepares the
algorithms and programs for the EC. The proposed coding system was developed

Card 1/3

ACCESSION NR: AR4023358

after an analysis of parts drawings prepared by the leading machine-building plants in Gor'kiy. To prevent inefficient use of the M, the authors established maximum parameters for certain initial data (particularly for the sizes of the workpieces and parts). Such limitations permitted the coding of drawings of gears, flanges, bushings, smooth and slotted axes, and shafts whose outer diameters and lengths do not exceed 4,000 mm, and which have no more than 15 outer and 7 inner surfaces. Only a few parts fail to meet these requirements. The coding system covers three groups of information. The first group contains information about the individual cylindrical and annular outer and inner surfaces, about the diameters and other linear dimensions, and about the accuracy and smoothness of the processed surfaces. The second group consists of information concerning the characteristics of individual surfaces or of such groups as, e.g., teeth, slits, key and other slots, grooves, threads, openings along directions other than the basic axis of the part, etc. This group include also information concerning the relative positions of various surfaces, their thermal treatment, etc. The third group includes information about the characteristics of the entire part, the changes in its mechanical properties, or external

Card 2/3

ACCESSION NR: AR4023358

appearance. A coded card is prepared for each part; it contains complete information about the part and its workpiece. All data from this card are transferred to punch cards or punched tape which is then fed into the M of the EC. The order of compiling the algorithm is given. There are 12 figures and 5 tables. N. Prikhod'ko.

DATE ACQ: 06Mar64

SUB CODE: IE, ML

ENCL: 00

Card 3/3

1. VUL'FOVICH, L. A.
2. USSR (600)
4. Sanitary Engineering
7. Stakhanovite work methods in the installation of sanitary and mechanical equipment. Biul. stroi. tekhn. 10, No. 7, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Unc1.

VULFOVICH, L. B.
BULFOVICH, L. B.

"Methods of study of power conditions of process of drawing with application of oscillography".

Report presented at the branch seminar on drawing of tube and aluminum alloys on self-aligning mandrels, Metallurgical Factory im V. I. Lenin, Kuybyshev, 24-28 June 1963

(Tsvet. Metally, No. 10, 1963 pp 84-85, author Starostin, Yu. S.
JPRS 24,651 19 May 1964

L32922-56 EWT(m)/EWT(s)/T/EWT(t)/EIL/EWF(k) IJP(c) JU/RG/SP

ACC NR: AP6017656 (N) SOURCE CODE: UR/0136/66/000/001/0075/0078

AUTHOR: Raytbarg, L. Kh; Vul'fovich, L. B.; Tomashchik, Ye. G.

45
B

ORG: none

TITLE: Deformation resistance of aluminum alloys under cold pressing conditions

SOURCE: Tsvetnyye metally, no. 1, 1966, 75-78

TOPIC TAGS: cold working, metal pressing, metal deformation, deformation rate, aluminum alloy / AD1 aluminum alloy, D1 aluminum alloy

ABSTRACT: The true yield strength S_y , which is affected by changes in temperature, degree of deformation (ϵ), and deformation rate (w), was studied in two typical aluminum alloys, AD1 (soft) and D1 (hard) under cold pressing conditions. In the AD1 alloy, the most pronounced increase in S_y is observed at $w = 0.5\text{--}3.0 \text{ sec}^{-1}$ (see Fig. 1). In the D1 alloy, the effect of a tenfold increase in deformation rate (from 0.5 to 5 sec^{-1}) is even greater than in AD1 (see Fig. 2). This is due to a greater evolution of heat during deformation, and to the resultant heating up of the specimen, which causes a more marked decrease of S_y . This phenomenon is more pronounced the higher the deformation rate. It is concluded that under cold pressing conditions, the deformation rate substantially affects the strength characteristics of aluminum alloys.

Orig. art. has: 3 figures.

Card 1/2

UDC: 669.71:620.17

L 55990-66

ACC NR: AP6017656

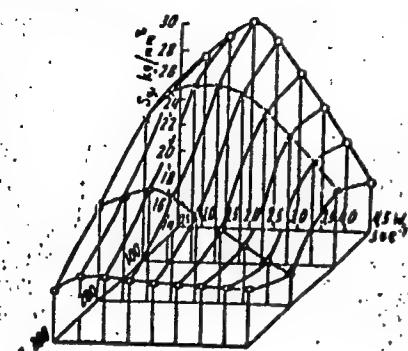


Fig. 1. S_y vs. rate w and temperature t , $^{\circ}\text{C}$ for AD1 alloys

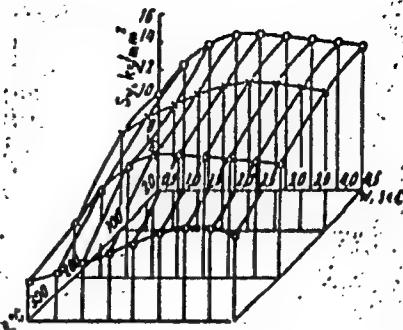


Fig. 2. S_y vs. rate w and temperature t , $^{\circ}\text{C}$ for D1 alloys

SUB CODE: //,13/ SUBM DATE: none/ ORIG REF: 005

Card 2/2 116

L 63975-35	E-T(m)/E-P(z)/E-P(b)/EVA(d)/EVP(t)	HJM	JD	
ACCESSION NR:	AP5014242	UR	0303/65/000/0024/0026	42
		66	187.6	17
AUTHOR:	Zabaluyev, Yu. I.; Smolyakov, V. F.; Vul'fovich, M. S.; Keganovskiy, G. P.; Stetsenko, N. A.; Yemel'yanenko, Yu. G.; Medovar, I. (Doctor of technical sciences); Latash, Yu. V. (Candidate of technical sciences)			41, 5
TITLE:	Improving the macrostructure of electroslag steels			
SOURCE:	Metallurgicheskaya i gornorudnaya promyshlennost', no. 2, 1965, 24-26			
TOPIC TAGS:	electroslag melting, steel			
ABSTRACT:	Crystallization bands (layers)--regions which are more resistant to etching than the base metal--are observed in the macrostructure of ball bearing and structural steels melted by the electroslag method using ANF-6 flux. In the ingot, these layers reproduce the contour of the bottom of the products they appear as rings. These crystallization changes in the rate at which the crystallization front advances due to disturbance of the thermal balance between the metal and slag bath. The effect of substituting AN-291 flux for ANF-6, 12Kh2N	17, 55	14	17
Card 1/2				

153975-65

ACCESSION NR: AP5014242

and 30KhGSNA steels were melted. The working current rate of flux consumption was increased by 15-25% over structure of forged and rolled specimens (circular and uniform without traces of layered crystallization inclusions is about the same with both fluxes. The elimination layers when AN-291 flux is used is due to the high flux which makes hotter smelting possible, increasing the thermal inertia of the melting zone. This effect acts as a "choke" which smooths out fluctuations in electrical more uniform ingot. Orig. art. has: 2 figures, 3 tables.

ASSOCIATION: none

SUBMITTED: 00

NO REF Sov: 002

ENCL: 0C

OTHER: 000

SUB CODE: MM

IVC
Card 2/2

L UNI/0-0/ EMT(m)/EMT(s)/ETI/EMF(k) IJP(u) JD

ACC NR: AP6031512

SOURCE CODE: UR/0383/66/000/004/0017/0019

AUTHOR: Zabaluyev, Yu. I.; Kaganovskiy, G. P.; Vul'fovich, M. S.

26

ORG: none

TITLE: Foreign inclusions in electroslag and vacuum arc melted steels

SOURCE: Metallurgicheskaya i gornorudnaya promyshlennost', no. 4, 1966, 17-19

TOPIC TAGS: electroslag ~~and~~ melting, vacuum ~~and~~ melting, METAL PURIFICATION

ABSTRACT: The origin of foreign inclusions found sometimes in electroslag and vacuum-arc melted steel ingots has been investigated. It was found that most of the inclusions consist of fragments of consumable electrodes loosened by cracking of the latter. One of the reasons for electrode cracking is the accumulation of thermal stresses originated during cooling after rolling. Steels ShKh15, ShKh15SG R18(M) and some others are the most susceptible to cracking during the initial period of melting. Preventive measures to avoid the contamination of steel are suggested. Orig. art. has: 4 figures.

[TD]

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 006

Card 1/1 *la*

UDC: 662.083.4:669.18

VUL'FOVICH, N.A.

Determining the temperature of a concrete block lying on old
concrete of rock. (Finding the function of cooling). Trudy
Lengidropoepta no.1:128-134 '64.

(MIRA 18:10)

GOFMAN, Ye.A.; VUL'FOVICH, R.D.; LOGACHEVA, V.A.; POLOZOV, A.I.; BERZIN, B.O., kand. tekhn. nauk, inzhener-polkovnik v otstavke, red.; KOZLOVTSEV, V.A., red.; YAKIMOVICH, Yu.K., red.-leksikograf; KUZ'MIN, I.F., tekhn. red.

[German-Russian dictionary of armored force terms] Nemetsko-russkii avtobronetankovyi slovar'. Pod red. B.O.Berzina. Moskva, Voen. izd-vo M-va obor. SSSR, 1961. 487 p. (MIRA 14:8)
(German language—Dictionaries—Russian)
(Tanks (Military science)—Dictionaries)

VUL'FOVICH, S.I.

Clinical aspect of periarteritis nodosa. Terap.arkh. 25 no.6:55-63
(MLBA 7:1)
N-D '53.

1. Iz Voyenno-meditsinskoy akademii im. S.M.Kirova.
(Arteries--Diseases)

VUL'FOVICH, S.O.

Clinical errors in determination of pulmonary basal metabolism.
(CLML 19:3)

Klin.med., Moskva no.4:87-89 Ap '50.

1. Of the Propedeutic Therapeutic Clinic (Head -- Honored Worker in Science and Corresponding Member of the Academy of Medical Sciences USSR, N.N.Savitskiy, Major-General Medical Corps), Naval Medical Academy imeni S.M.Kirov, Leningrad.

Vulfovich, S.I.

USSR/Human and Animal Physiology - Breathing.

R-6

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 70782

Author : Vulfovich, S.I., Medvedev, V.V.

Title : Some Controversial Problems of Functional Diagnosis of Internal Breathing.

Orig Pub :

Abstract : The authors propose the term "insufficiency of internal breathing", and the only reliable criterion of this state is considered to be arterial hypoxemia or hypercarbia. Changes in the ventilation indicators (vital volume of lungs, of the breathing equivalent, Harrison's ventilation indicator, Maximum ventilation) are not considered as sufficient basis for the constancy of inner breathing insufficiency. Often in several illnesses of the respiratory and cardio-vascular systems changes are observed in the ventilation indicators and shortness of breath in absence of arterial hypoxemia. In such cases it is

Card 1/2

- 7 -

USSR/Human and Animal Physiology - Breathing.

R-6

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 70782

incorrect to speak of "insufficiency of internal breathing". The authors note, that arterial hypoxemia and hypercapnia may arise in other states (i.e. congenital heart defects) not related to insufficiency of the inner breathing.

Card 2/2

- 8 -

PROKOF'YEV, Vasiliy Platonovich; SUPCNITSKIY, M.Ya., dots., kand.
med. nauk, retsenzent; STREMLINA, S.M., retsenzent; MEDOKS,
T.S., retsenzent; VUL'FOVICH, V.O., spets. red.; RAUHE, P.V.,
inzh., spets. red.; FUKS, V.K., red.

[Industrial sanitation in food industry enterprises] Proiz-
vodstvennaia sanitariia na predpriatiiakh pishchevoi pro-
myshlennosti. Moskva, Pishchevaiia promyshlennost', 1964.
(MIRA 18:3)
295 p.

KHAT'YANOV, F.I.; IVANOVA, Z.S.; VUL'FOVICH, Yu.G.

Tectonics of the Yuryuzan'-Sylva Depression. Geol.nefti i gaza 6
no.4:36-39 Ap '62. (MIRA 15:4)

1. Trest Bashneftegeofizika.
(Ural Mountain region--Geology, Structural)

L 05724-67 EWT(d) IJP(c)

ACC NR: AP6018100

SOURCE CODE: UR/0144/65/000/008/0841/0848

AUTHOR: Vul'fson, Aleksandr Veniaminovich (Aspirant)ORG: Leningrad Polytechnic Institute (Leningradskiy politekhnicheskiy institut)

TITLE: Numerical method of determining transient processes in non-linear automatic systems on digital computers, based on computation of convolution integral

SOURCE: IVUZ, Elektromekhanika, no. 8, 1965, 841-848

TOPIC TAGS: digital computer, nonlinear automatic control system, differential equation

ABSTRACT: A method is suggested for determination on computers of a transient process in a system with one or more non-linear characteristics, using Carson's equation for the transient process in a system with branched linear portion and one non-linearity, involving the convolution integral. The method does not require composition of a system of differential equations. Initial data required the transfer functions of the linear portion of the system; the procedure for programming the solution of a concrete problem is simplified, consisting mainly in the introduction of the numbers. The nonlinearities may be given by table and may have breaks (relay characteristics). Orig. art. has: 5 figures and 13 formulas. JPRS

SUB CODE: 09 / SUBM DATE: 11Jan65 / ORIG REF: 004 / OTH REF: 001

Card 1/1 *pla*

UDC: 681.142+62-501.14

VUL'FSON, B. I.

VEGR/Engineering

Nov/Dec '63

Turbines

Fuel Conservation

"Utilization of Exhaust Heat in Steam Turbine Plants," B. I. Vul'fson, Cand Tech Sci, 5½ pp

"Kotloturbostroy" No 6 - p.16-21

Gives method to solve the problem of decreasing fuel consumption by using exhaust steam for pre-heating. Works out formulas for several cases with different flow conditions. Shows principal diagrams and tables for several medium and high-pressure turbine plants, and illustrates practical application of formulas deduced.

63/49T24

2199. SELECTION OF STEAM CHARACTERISTICS FOR BOILERS UTILISING OPEN HEARTH FURNACE GASES IN WORKS WHERE STEAM IS SUPPLIED BOTH FOR POWER AND HEATING. Vul'fson, BI (Za Ekon. Topliva (Fuel Econ.), 1949, (9), 21-24). The author examines this problem as it applies to a typical engineering works in the U.S.S.R. and concludes that a suitable steam pressure is 14 atmospheres at 200°-350° C. (L)

ASB-1A. METALLURGICAL LITERATURE CLASSIFICATION

BOOKS, ARTICLES

TECHNICAL PAPERS

BOOKS, ARTICLES

TECHNICAL PAPERS

VULFSON, B.I. (Engineer), GERASIMOV, V.N.
KOLESNIKOV, I.L.

Electric Power Plants

Heating and electric power units with a flue gas temperature of 100° C. Za ekon. top. 9
No. 5 (1952)

Monthly List of Russian Accessions, Library of Congress, August 1952. UNCLASSIFIED.

VUL'FSON, B.I.; MIKHALEV, N.N., redaktor; POLYAKOV, K.S., redaktor;
VORONETSEVA, L.V., tekhnicheskiy redaktor

[Power evaluation of heat flow in power plants] Energeticheskia
otsenka teplovyykh potokov v energostanovkakh. Moskva, Gos. energ.
izd-vo, 1954. 150 p.
(Electric power plants) (Waste heat)

22(7)

SOV/3-59-3-5/48

AUTHOR: Vul'fson, B.L., Candidate of Historical Sciences,
Docent

TITLE: The School is Waiting for a Versatile Educated Teacher
(Shkola zhdet vsestoronne obrazovannogo uchitelya)

PERIODICAL: Vestnik vysshey shkoly, 1959, Nr 3, pp 16-18 (USSR)

ABSTRACT: Now, when the curricula and programs of pedagogical institutes are being revised, it is important to more precisely define some of the principles on which higher pedagogical education must be built. This is also emphasized in A.G. Orlov's article published in Nr 12, 1958, of this periodical. The author disagrees with some of Orlov's arguments on the level of a teacher's training and maintains that a pedagogical institute graduate taking up work in a secondary school must have higher education not only in the field of pedagogics but also in the specific branch of science chosen by him. He thinks that it is the task of a pedagogical institute and of any other

Card 1/2

SOV/3-59-3-5/48

The School is Waiting for a Versatile Educated Teacher

higher educational institution, to give the students a scientific outlook which will enable them to study independently and assimilate what is new in science and what they will encounter in their future work. In the system of training teachers of versatile education, the author proposes some changes. As an example, he mentions the historic-philological faculty turning out teachers of the Russian language, literature and history. He backs the suggestion already raised in the press that the students should specialize in one subject within the limits of an all-round education, and outlines how this could be accomplished.

ASSOCIATION: Irkutskiy pedagogicheskiy institut (Irkutsk Pedagogical Institute)

Card 2/2

BELUGA, S.M.; VUL'FSON, D.A.

Continuous rotary mills. Suggested by S.M.Beluga, D.A.Vul'fszon,
Rats.i izobr.v stroi. no.9:89-91 '59. (MIRA 13:1)

1. Glavnnyy inzhener Khar'kovskogo zavoda metlakhskikh plitok
Khar'kov, ul.Kotlova, d.67 (for Beluga). 2. Glavnnyy mekhanik
Khar'kovskogo zavoda metlakhskikh plitok Khar'kov, ul.Kotlova,
d.67. (for Vul'fszon).

(Milling machinery)

DYMSHITS, Mikhail Abramovich; VUL'FSON, D.L., inzh., retsenzent; FURER,
P.Ya., red.; GORNOSTAIPOL'SKAYA, M.S., tekhn. red.

[Repairing press-forging equipment] Razmont kuznechno-pressovogo
oborudovaniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.
lit-ry, 1961. 140 p. (MIRA 14:6)
(Forging machinery--Maintenance and repair)

IVCHENKO, Anatoliy Georgiyevich; ROKHLENKO, Mikhail Abramovich;
SMOLENSKIY, Boris Lipovich ; NATALICH, D.D., inzh.,
retsenzent; VUL'FSOM, D.L., inzh., red.; POLIPENKO, Yu.P.,
inzh., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Modernization of universal metal-cutting equipment] Moderni-
zatsiia universal'nogo metallorezhushchego oborudovaniia.
Moskva, Mashgiz, 1962. 153 p. (MIRA 15:7)
(Machine tools--Technological innovations)

L 04255-67 EWT(m)/T DJ

ACC NR: AP6005377

(N)

SOURCE CODE: UR/0413/66/000/001/0121/0122

AUTHORS: Vul'fson, D. L.; Rubinshteyn, I. I.; Avrekh, D. E.; Val'tsis, U. A.; Korchinskiy, V. K.; Geyfman, I. Yu.38
B

ORG: none

TITLE: A continuously variable variator of the number of revolutions of an output shaft. Class 47, No. 17724 [announced by Kiev Machine Construction Plant im. M. I. Kalinin (Kiyevskiy mashinostroitel'nyy zavod)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 121-122

TOPIC TAGS: bushing, shaft, speed regulator

ABSTRACT: This Author Certificate presents a continuously variable variator of the number of revolutions of an output shaft. The device contains conical sliding disks with control levers on two parallel shafts. The disks are spanned by an endless flexible traction organ, the tension of which is controlled. To reduce the dimensions of the variator without reducing the transmittable power and to increase the stability of the number of revolutions, it is equipped with an additional shaft situated between the shafts with the sliding disks and parallel to them and having a threaded stem. Rigidly attached to the additional shaft are two cams and a bushing, a control nut that rests on the bushing, and a self-stopping screw pair with a worm gear connected to the bushing by a sliding key. The control levers are

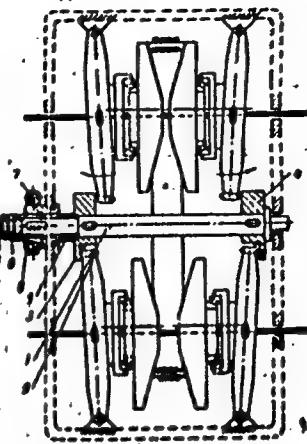
Card 1/2 //

UDC: 621.85-551.4

L 04255-67

ACC NR: AP6005377

Fig. 1. 1 - additional shaft; 2 - threaded stem;
3 and 4 - cams; 5 - bushing; 6 - control
nut; 7 - self-stopping screw pair;
8 - sliding key; 9 - rollers of control
levers



double-beat and armless, are equipped with rollers which interact with the cams, and are hinged in the housing. Orig. art. has: 1 diagram.

SUB CODE: 13/ SUBM DATE: 30Nov64

Card 2/2 fv

GONCHAROV, V.; VUL'FSON, E., red.

[Technology of multiple machining on machine tools]
Gruppovaia tekhnologija na metallorezhushchikh stankakh.
Riga, Liesma, 1965. 68 p. (MIRA 19:1)

VUL'FSON, G.A.; MEL'NIKOV, P.P.; ZUPNIK, D.N.

Recurrences of typhoid fever in relation to the type of treatment.
Vrach. delo no. 1:116-117 '61. (MIK: 14:4)

1. Makeyevskaya rudnichnaya bol'nitsa Stalinskoy oblasti.
(TYPHOID FEVER)

DRIZINA, Tat'yana Zinov'yevna; FERBER, Anna Adol'fovna; VUL'FSON, E.
[Vulfsen, E.], red.; ZARIN'SH, K.[Zarins, K.], tekhn. red.

[Wages for automobile chauffeurs; work practice of automotive
transportation units of the Latvian S.S.R.] Oplata truda sho-
ferov avtomobilei; opyt raboty avtotransportnykh khoziaistv
Latviiskoi SSR. Riga, Latviiskoe gos. izd-vo, 1961. 103 p.
(MIRA 15:2)

(Latvia--Wages--Transportation, Automotive)

ZUPNIK D.N. [Zupnyk, D.N.]; MEL'NIKOV, P.P. [Mel'nykov, P.P.]; VUL'FSON,
G.A. [Vul'fson, H.A.]

Typhoid fever in parturients. Ped., akush. i gin. 22 no.4:51-52
'60. (MIRA 14:5)

1. Makiiva'ka rudnichna likarnya (golovniy likar - N.I.Shvets').
(PREGNANCY, COMPLICATIONS OF) (TYPHOID FEVER)

ZUPNIK, 'D.N.; MEL'NIKOV, P.P.; VUL'FSON, G.A.

Clinical characteristics of typhoid fever of water origin. Vrach.
(MIRA 14:6)
delo no.4:109-111 Ap '61.

1. Makeyevskaya rudnichnaya bol'nitsa.
(TYPHOID FEVER)

VUL'FSON, G.A.

Cases of recovery from acute dystrophy of the liver in Botkin's
disease. Vrach.delo no.5:515-517 My '60. (MIRA 13:11)

1. Makeyevskaya rudnichnaya bol'nitsa.
(HEPATITIS, INFECTIOUS)

AID P - 4783

Subject : USSR/Engineering
Card 1/1 Pub. 103 - 10/24
Author : Vul'fson, I. A.
Title : Selection of proper accelerated speed in metal-cutting machines.
Periodical : Stan. i. instr., 3, 29-32, Mr 1956
Abstract : The author presents the needed formulae for determination of the proper accelerated speeds of the spindle headstock, sliding carriage, and supports in metal-cutting machines. Six formulae, 1 table, 1 graph and 2 kinematic schemes. Five Russian references (1948-1952).
Institution : Experimental Scientific Research Institute of Metal-Cutting Machines (ENIMS).
Submitted : No date

ZUPNIK, D.N.; MEL'NIKOV, P.P.; VUL'FSON, G.A.

Some characteristics of the blood picture and Widal reaction in
typhoid fever patients treated and untreated with syntomycin.
Zdrav. Bol. 8 no.11:46-49 N '62. (MIRA 16:5)

1. Iz Rudnichnoy bol'nitay g. Makeyevki (glavnnyy vrach N.I.
Shvets).
(TYPHOID FEVER) (BLOOD—ANALYSIS AND CHEMISTRY)
(MEDICAL TESTS) (ACETAMIDE)

83283

B&R

28,1000
1,5000S/121/60/000/009/001/006
A004/A001AUTHORS: Zusman, V.G., Vul'fson, I.A.TITLE: The Selection of a Coded Decimal System

PERIODICAL: Stanki i Instrument, 1960, No. 9, pp. 3-6

TEXT: In their article the authors refer to some special problems of coding which are characteristic for program-controlled machine tools. They enumerate a number of conditions on which the most expedient methods of program coding depend and which are mainly determined by operational requirements. They point out that numerically controlled machine tools of Soviet and foreign manufacture use the following coding systems: the decimal, the "5 x 2", "2 from 5", coded-decimal and binary systems. Their further investigations deal only with the selection of a coded decimal system, the application of which extends more and more, since it gives the most satisfactory results concerning operational requirements. The quantity of numerical combinations in the code is expressed by the formula

$$C_9^4 = \frac{9!}{(9-4)!4!}$$
, while only 16 such combinations, which are presented, would meet the required conditions and only the following 4 of the mentioned combinations

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S/121/60/009/009/001/006

A004/A001

The Selection of a Coded Decimal System

would be suitable for machine tools with pulse circuits of transmission ratio modification: 5211, 4311, 4221, and 3321. It is pointed out that for the selection of the particular values of numbers in the code the following points have to be considered: 1) the least possible value of K (the ratio of the nominal to minimum value of the reciprocal pulse duty factor of the pulse series coming out of the linear interpolator) which ensures the greatest possible coefficient of utilization of machine tool and program carrier:

$$K = \frac{f_{\max}}{f_{\text{nom}}} ; \quad f_{\max} = \frac{1}{T_{\text{min}}} ; \quad f_{\text{nom}} = \frac{1}{T_{\text{nom}}}.$$

2) The most reliable program input which is taken to be proportional to the average number of switch-on contacts necessary for the transmission of one decimal digit.
3) Simplicity of decade formation in the control circuits. 4) Simplicity of decade formation in the decoder. The authors present pulse succession graphs for a number of decades, including the most important cases, give a detailed description of the simplicity of decade formation in the control circuits and in the decoder and cite a universal ferrotransistor decade system which has been used by the

Card 2/3

83283

S/121/60/000/009/001/006

A004/A001

The Selection of a Coded Decimal System

ENIMS lately. The results of comparing the codes by various criteria show that the code 2421P (2421R) is the optimum one. In this case the value of K is the least, while the other factors mentioned have the optimum values. There are 11 figures and 4 tables. *✓*

Card 3/3

RATMIROV, Valeriy Arkad'yevich; IVOBOTENKO, Boris Alekseyevich;
VUL'FSON, I.A., red.; FRIDKIN, L.M., tekhn. red.

[Pulse motors for automatic control systems] Shagovye dvigateli
dlia sister avtomaticheskogo upravleniya. Moskva, Gosenergo-
izdat, 1962. 125 p. (Biblioteka po avtomatike, no.66)
(MIRA 16:1)

(Electric motors)

Vul'fson, I. A.

AID P - 5179

Subject : USSR/Engineering

Card 1/2 Pub. 103 - 1/24

Authors : Zusman, V. G. and I. A. Vul'fson

Title : Simultaneous and sequential control of machine tools

Periodical : Stan. i instr., 7, 1-9, J1 1956

Abstract : Referring to numerous foreign sources, mostly American and English, on automatic and computer-controlled machine-tools, the authors discuss various simultaneous and sequential control systems. They describe the punch-card method, the L. A. Gleyzer system, tape and other recording systems, also - several methods of interpolation and the back-feed controls. The selsyn system and the Ferranti diffraction grating system are also discussed. Twenty three diagrams, 4 photos; 31 non-Russian references, predominantly American and English (1954-1956), and 3 Russian references (1955-1956).

AID P - 5179

Stan. 1 instr., 7, 1-9, J1 1956

Card 2/2 Pub. 103 - 1/24

Institution : None

Submitted : No date

VUL'FSON, I. A.

"The development of automation of program setting abroad."

Programmed Control of Metal Cutting Machines. report presented at
All-Union Conference, Moscow, 13-16 Nov 1957
Vestnik Ak. Nauk SSSR, 1958, No. 2, pp. 113-115, (author Kobrinskiy, A. Ye.)

VULFSON, I. A.

PHASE I BOOK EXPLOITATION

761

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti

Avtomatizatsiya i mekhanizatsiya protsessov proizvodstva v priborostroyenii
(Automation and Mechanization of Production Processes in Instrument
Manufacturing) Moscow, Mashgiz, 1958. 591 p. 8,500 copies printed.

Ed.: Gavrilov, A. N., Doctor of Technical Sciences, Professor; Reviewer:
Vladziyevskiy, A. P., Doctor of Technical Sciences; Ed. of Publishing House:
Kachetova, G. F., Engineer; Tech. Ed.: Model', B. I.

PURPOSE: This book is intended for engineers, technicians, and scientific personnel concerned with mechanization and automation of production processes in instrument manufacturing, and for students and teachers of this subject in universities.

COVERAGE: The book describes the characteristic features of the present state of mechanization and automation of production processes in the instrument industry. Part 1. describes the planning of automation means, the theory of precision, economic efficiency under automated production conditions, and also

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Automation and Mechanization of (Cont.)

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the theory and practice of overall mechanization and automation. Parts 2, 3, and 4 discuss the most characteristic and effective methods and means of automation and mechanization in all stages of instrument manufacturing. No personalities are mentioned. There are no references.

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Automation and Mechanization of (Cont.)

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Automation and Mechanization of (Cont.)

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